

pamphlet. All patients and staff from referring units asked for more visual information; video with patients going through transplant and pictures of the transplant unit. Some asked for a list with links to national and international web pages about BMT and a list with frequently asked question (FAQ). Patients suggested that staff from the transplant unit should go to referring hematology units to teach staff. Contact to the Danish Cancer Society has been established and a video production has started. Video will be ready in early 2014 and will be posted on the Danish Cancer Society's web site and a link will be present on the hospital web page. A time line with information about the deferent processes has been created and is posted on the hospital web page together with links to books about transplant, which can be downloaded. Links to relevant national and international web pages has been posted. List with FAQ has been developed and posted on the web page.

Discussion & Implications: To introduce the new part of the hospital website to doctors and nurses at referring hematology units. To post the website so current and future patients will get to know it. To post pictures of the BMT unit on the hospital website. Future project is to arrange visit/meetings with referring hematology units, teaching staff.

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Evidence Based Practice: Cryotherapy for Patients Receiving High Dose Melphalan

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Topic Significance & Study Purpose/Background/Rationale: Oral mucositis (OM) results in significant morbidity and mortality in hematopoietic stem cell transplant (HSCT) patients. HSCT nurses impact OM outcomes. Goals of this evidence based practice (EBP) project are (1) review concepts of EBP, and (2) apply EBP to the clinical problem of OM in HSCT. A PICOT question was formulated: In HSCT patients receiving high dose melphalan, does using oral cryotherapy versus not using cryotherapy decrease the amount of mucositis patients experience through day plus thirty? Three data bases were searched and ten studies were retained for critical review. The evidence supports the use of cryotherapy in HSCT. A nurse practitioner and two nurse champions led the team of nurses and other professionals to collaboratively implement the practice change.

Methods, Intervention, & Analysis: An educational session reviewing EBP, the problem and assessment of OM, the evidence, and the cryotherapy protocol, was attended by 100% of the clinical staff and support staff. Patients are given an explanation of the potential benefits of oral cryotherapy and can accept or refuse the intervention. The World Health Organization (WHO) mucositis scale is used to evaluate OM. Outcome measures include grade and duration of OM, need for hospitalization for OM, and use of TPN. Practice change is measured by how many patients are offered cryotherapy and frequency of OM grading. Data is obtained by a nurse and reviewed independently by a second nurse.

Findings & Interpretation: This pilot included the first 16 patients who received melphalan. All of the patients were offered cryotherapy and 100% of patients accepted cryotherapy. The highest grade of OM was 3. Four patients had no OM. No patients were hospitalized for mucositis and no patients received TPN secondary to OM.

Discussion & Implications: Findings demonstrate practice change occurs when nurses know the evidence. Additionally, when patients are presented with self care options for

symptom prevention they are willing participants. The findings are consistent with evidence in the literature: cryotherapy reduces the incidence and severity of mucositis in this setting. Further study is needed to determine how long patients need to implement cryotherapy to get maximal results and to determine best practice to prevent mucositis outside the oral cavity.

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Implementation of a Standardized Cardiac Monitor Care Process to Reduce Nuisance Alarms

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Topic Significance & Study Purpose/Background/Rationale:

Excessive alarms create desensitization and alarm fatigue. Recently, the Joint Commission declared a sentinel event alert regarding improper alarm monitoring. Nurses play a key role in daily management of cardiac monitor care. We created and implemented a standardized cardiac monitor care process (CMCP) on a large bone marrow transplant (BMT) unit using the Improvement Methodology. The global aim of this project was to improve patient safety, satisfaction, and utilization of resources through decreasing monitor alarms by standardizing care.

Methods, Intervention, & Analysis: Through small tests of change, we developed and implemented a standardized CMCP in a 24-bed BMT unit. The CMCP included: 1) process of initial ordering and setting of monitor based on age appropriate standards; 2) pain free daily replacement of electrodes; 3) daily individualized assessment of cardiac monitor settings; 4) reliable process for appropriate discontinuation of monitor. The model for improvement was used to design, test, and implement changes. The key drivers and interventions can be seen in Figure 1. Changes that were implemented after testing and adaptation: family/patient engagement in CMCP, creation of a monitor care log to address settings, lead changes, and discontinuation; development of a pain free process for electrode removal; increase in high respiratory rate settings. Compliance with the CMCP was measured as percent compliance with the overall process. Alarms were measured in cardiac monitor alarms per monitored patient day.

Findings & Interpretation: From January-September 2013, percent compliance with the CMCP increased from 30% to >90% compliance (median=93%) Figure 2. Number of alarms per patient day decreased from 180 to 25 (median=32) alarms/day during this time period Figure 3.

Discussion & Implications: Implementation of the standardized CMCP results in a significant decrease in cardiac monitor alarms per patient day.

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Improving Efficiency of BMT LTFU Clinic, Resulting in Increased Patient Satisfaction

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Topic Significance & Study Purpose/Background/Rationale:

Clinic staff of the multidisciplinary bone marrow transplant (BMT) long term follow up (LTFU) clinic evaluated current process and flow and identified several areas of improvement.